UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.usptb.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

10/05/2004

LEE & STERBA, P.C. Suite 2000 1101 Wilson Boulevard Arlington, VA 22209 EXAMINER
AUDUONG, GENE NGHLA

PAPER NUMBER

ART UNIT 2818

DATE MAILED: 10/05/2004

| APPLICATION NO. | LICATION NO. FILING DATE FIRST NAMED INVENTOR | | ATTORNEY DOCKET NO. CONFIRMATION | |
|-----------------|---|--------------|----------------------------------|------|
| 10/660,802 | 09/12/2003 | Hyung-Rok Oh | 239/176 | 7060 |

TITLE OF INVENTION: MAGNETIC MEMORY DEVICE IMPLEMENTING READ OPERATION TOLERANT TO BITLINE CLAMP VOLTAGE (VREF)

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1370 | \$300 | \$1670 | 01/05/2005 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WIL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check box 5a on Part B Fee Transmittal and pay the PUBLICATION FEE (if required) and 1 the ISSUE FEE shown above.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed wh

| appropriate. All further co indicated unless corrected maintenance fee notificatio | rrespondence including the P below or directed otherwise ins. | atent, advance ord in Block 1, by (a) | lers and notific specifying a | cation o | f maintenance fees respondence address | will be mailed to the current; and/or (b) indicating a sep | t correspondence address arate "FEE ADDRESS" | |
|---|---|--|--|---|---|---|--|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 7590 10/05/2004 | | | | N F P | Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission. | | | |
| LEE & STERBA Suite 2000 1101 Wilson Boule Arlington, VA 222 | A, P.C. | | | | Ce | rtificate of Mailing or Tran nis Fee(s) Transmittal is bein with sufficient postage for fin il Stop ISSUE FEE address TO (703) 746-4000, on the | smission | |
| | | | | <u> </u> | | | (Depositor's na | |
| | | | | - | | | (Signat | |
| | | | | L | | | (D | |
| APPLICATION NO. | FILING DATE | F | IRST NAMED I | INVENT | OR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
| 10/660,802 | 09/12/2003 | | Hyung-Ro | k Oh | | 239/176 | 7069 | |
| APPLN. TYPE | AGNETIC MEMORY DEVI | CE IMPLEMENT | · · | | ION TOLERANT TO | D BITLINE CLAMP VOLTA | AGE (VREF) DATE DUE | |
| nonprovisional | NO | \$1370 | | 100 | \$300 | \$1670 | | |
| | | | | | | φ1070 • | 01/05/2005 | |
| | MINER | ART UNI | Т | CLA | SS-SUBCLASS | J | | |
| AUDUONG, | GENE NGHIA | 2818 | | 3 | 365-210000 | | | |
| "Fee Address" indicate PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AND | dence address (or Change of C 22) attached. tion (or "Fee Address" Indication or more recent) attached. Use | ion form of a Customer PRINTED ON TI | (1) the name or agents OR (2) the name registered at 2 registered plisted, no nar | es of up R, alternation of a sir torney of patent a me will b | ngle firm (having as a ragent) and the nam ttorneys or agents. If be printed. | a member a 2es of up to no name is 3 | | |
| (A) NAME OF ASSIGN | | (B) | RESIDENCE: | : (CITY | and STATE OR CO | UNTRY) | | |
| 4a. The following fee(s) are | e assignee category or categori | | Payment of Fe | <u> </u> | ☐ Individual ☐ C | orporation or other private gr | oup entity Governm | |
| ☐ Issue Fee | | | * | ` ' | unt of the fee(s) is en | closed. | | |
| ☐ Issue Fee ☐ A check in the amount of the fee(s) is enclosed. ☐ Publication Fee (No small entity discount permitted) ☐ Payment by credit card. Form PTO-2038 is attached. | | | | | | | | |
| Advance Order - # of Copies The Director is hereby authorized by charge the required fee(s), or credit any overpayment Deposit Account Number (enclose an extra copy of this form). | | | | | | | | |
| | (from status indicated above) MALL ENTITY status. See 37 | | _ | | | | | |
| | | | on Ees (if any) | it is no ic | onger claiming SMA | LL ENTITY status. See 37 C | FR 1.27(g)(2). | |
| NOTE: The Issue Fee and Ponterest as shown by the reco | is requested to apply the Issue ublication Fee (if required) wi ords of the United States Paten | Il not be accepted t and Trademark C | from anyone of Office. | ther than | the applicant; a regi | stered attorney or agent; or the | he assignee or other part | |
| Authorized Signature | | | | | Date | | | |
| | | | | | Registration | No | | |
| This collection of information application. Confidential submitting the completed aphis for and/or suggestions and/or suggestions 1450, Alexandria, Virgi | on is required by 37 CFR 1.311 ity is governed by 35 U.S.C. 1 plication form to the USPTO for reducing this burden, sho mia 22313-1450. DO NOT SI | 1. The information 22 and 37 CFR 1. . Time will vary d uld be sent to the END FEES OR CO | is required to on the collection of the collecti | obtain o ction is on the indition Offi ORMS | r retain a benefit by the stimated to take 12 plividual case. Any concer, U.S. Patent and TO THIS ADDRESS | he public which is to file (an minutes to complete, includir mments on the amount of ti Trademark Office, U.S. Dep SSND TO: Commissions | d by the USPTO to proc ag gathering, preparing, me you require to comp artment of Commerce, P | |

Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------------|---------------|----------------------|-------------------------|-----------------|
| 10/660,802 | 09/12/2003 | Hyung-Rok Oh | 239/176 | 7069 |
| 75 | 90 10/05/2004 | | EXAM | INER |
| LEE & STERBA, Suite 2000 | , P.C. | | AUDUONG, G | ENE NGHLA |
| 1101 Wilson Boule | vard | | ART UNIT | PAPER NUMBER |
| Arlington, VA 2220 |)9 | | 2818 | |
| | | | DATE MAILED: 10/05/2004 | • |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a h months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|----------------|----------------------|-------------------------|------------------|
| 10/660,802 | 09/12/2003 | Hyung-Rok Oh | 239/176 | 7069 |
| 7: | 590 10/05/2004 | • | EXAM | INER |
| LEE & STERBA | ., P.C. | | AUDUONG, G | ENE NGHIA |
| Suite 2000 1101 Wilson Boule | evard | | ART UNIT | PAPER NUMBER |
| Arlington, VA 222 | 09 | | 2818 | |
| | | | DATE MAILED: 10/05/2004 | 4 |

Notice of Fee Increase on October 1, 2004

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2004, then t amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" because some fees w increase effective October 1, 2004. See Revision of Patent Fees for Fiscal Year 2005; Final Rule, 69 Fed. Reg. 5260 52606 (May 10, 2004).

The current fee schedule is accessible from WEB site (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in vie of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processi delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowan is to be filed on or after October 1, 2004 (or mailed with a certificate of mailing on or after October 1, 2004), t issue fee paid should be the fee that is required at the time the fee is paid. See Manual of Patent Examining Procedu (MPEP), Section 1306 (Eighth Edition, Rev. 2, May 2004). If the issue fee was previously paid, and the response the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue f now due, then the difference between the issue fee amount at the time the response is filed and the previously-pa issue fee should be paid. See MPEP Section 1308.01.

Effective October 1, 2004, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

| By a small entity (Sec. 1.27(a)) | \$685.00 |
|--|----------|
| By other than a small entity | |
| (b) Issue fee for issuing a design patent: | , |
| By a small entity (Sec. 1.27(a)) | \$245.00 |
| By other than a small entity | \$490.00 |
| (c) Issue fee for issuing a plant patent: | |
| By a small entity (Sec. 1.27(a)) | \$330.00 |

By other than a small entity......\$660.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of t Office of Patent Publication at (703) 305-8283.